

EXAMINER'S AMENDMENT

1. An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this Examiner's amendment was given in a telephone interview with Louis Weinstein on July 8, 2010.

3. The application has been amended as follows:

CLAIMS

- Please **replace Claim 8** with the following:

“8. The image pickup system according to claim 2, wherein the shooting condition estimator comprises:

an image characteristic detector for detecting, based on the signal, characteristics of the image based on the signal; and

a regional estimator for estimating the shooting condition of respective regions when an image based on the signal is acquired, based on the image characteristics detected by the image characteristic detector.”

- Please **replace Claim 9** with the following:

“9. The image pickup system according to claim 8, wherein the image characteristic detector comprises at least one type of unit selected from among a specific color detector for detecting specific color regions as image characteristics from the signal, a specific brightness

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detector for detecting specific brightness regions as image characteristics from the signal, and a frequency detector for determining frequency information in local regions of a specified size as image characteristics from the signal.”

- Please **replace Claim 10** with the following:

“10. The image pickup system according to claim 8, wherein the image status estimator further comprises a down sampler for down sampling the signal, and the image characteristic detector detects the image characteristics of the image based on the signal down sampled by the down sampler.”

- Please **replace Claim 11** with the following:

“11. The image pickup system according to claim 2, wherein the noise reducing unit comprises:

a threshold value setting unit for setting an amplitude value of the noise as a threshold value based on the amount of noise corrected by the correction unit, for one of each pixel, and each specified unit area comprising a plurality of pixels; and

a smoothing unit for reducing amplitude components in the signal that are equal to or less than the threshold value set by the threshold value setting unit.”

- Please **replace Claim 12** with the following:

“12. The image pickup system according to claim 3, wherein the noise amount calculator comprises a unit that calculates an amount of noise N using a signal value level L of the signal, a

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temperature T of the image pickup element, a gain G for the signal and a shutter speed S during shooting as parameters, and comprises:

a coefficient calculator for calculating four coefficients A, B, C and D based on three functions $a(T, G)$, $b(T, G)$ and $c(T, G)$ using the temperature T and gain G as parameters, and a function $d(S)$ using the shutter speed S as a parameter; and

a function calculator for calculating the amount of noise N where:

$$N = (AL^B + C)D$$

defined by the four coefficients A, B, C and D calculated by the coefficient calculator.”

- Please **replace Claim 14** with the following:

“14. The image pickup system according to claim 3, wherein the noise amount calculator comprises:

an assigning unit for assigning standard values as standard parameter values for parameters not obtained from the parameter calculating means; and

a look-up table for determining the amount of noise by inputting the signal value level, temperature, gain and shutter speed obtained from one of the parameter calculator and the assigning unit.”

- Please **replace Claim 20** with the following:

“20. The image pickup system according to claim 1, wherein the shooting condition estimator comprises:

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an image characteristic detector for detecting, based on the signal, characteristics of the image based on the signal; and

a regional estimator for estimating the shooting situation of respective regions when an image based on the signal is acquired, based on the image characteristics detected by the image characteristic detector.”

- Please **replace Claim 21** with the following:

“21. The image pickup system according to claim 20, wherein the image characteristic detector comprises at least one type of unit selected from among a specific color detector for detecting specific color regions as image characteristics from the signal, a specific brightness detector for detecting specific brightness regions as image characteristics from the signal, and a frequency detector for determining frequency information in local regions of a specified size as image characteristics from the signal.”

- Please **replace Claim 22** with the following:

“22. The image pickup system according to claim 20, wherein the image status estimator further comprises a down sampler for down sampling the signal, and the image characteristic detector detects the image characteristics of the image based on the signal down sampled by the down sampler.”

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- Please **replace Claim 26** with the following:

“26. The image pickup system according to claim 15, wherein the noise amount calculator comprises:

an assigning unit for assigning standard values as standard parameter values for parameters not obtained from the parameter calculating means; and

a look-up table for determining the amount of noise by inputting the signal value level, temperature, gain and shutter speed obtained from one of the parameter calculator and the assigning unit.”

Conclusion

4. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P. Misleh whose telephone number is (571) 272-7313. The Examiner can normally be reached Monday - Friday between 8:30 AM - 3:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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**/Justin P. Misleh/
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July 12, 2010**